

§Appl. No. 09/914,831
Amdt. dated November 5, 2003

Listing of Claims:

Claim 1 (Currently Amended) An isolated mammalian polypeptide having the enzyme activity of a histidine protein phosphatase which specifically dephosphorylates phosphohistidine and has a molecular weight of 13,000-15,000 Da as determined by SDS electrophoresis, and which is isolated by a method comprising at least one step of anion exchange chromatography, gel filtration, and Blue sepharose affinity chromatography.

Claim 2 (Previously Presented) An isolated polypeptide according to claim 1 comprising at least the amino acid sequence motif
DCECLGGGRISHQSQD (SEQ ID NO:3)

Claim 3 (Previously Presented) An isolated polypeptide according to claim 1 comprising at least the amino acid sequence motif
DCECLGGGRISHQSQDX¹KIHVYGYSMX²YGX³AQH (SEQ ID NO:4)
wherein X¹ = K or R, X² = A or G and X³ = P or R.

Claim 4 (Previously Presented) An isolated polypeptide according to claim 1 comprising at least the amino acid sequence motif
YHADIYDKVSGDMQKQGCDCECLGGGRISHQSQDKKIHVYGYSM (SEQ ID NO:5).

Claim 5 (Previously Presented) An isolated mammalian polypeptide having the enzyme activity of a histidine protein phosphatase which specifically dephosphorylates phosphohistidine and has a molecular weight of 13,000-15,000 Da as determined by SDS electrophoresis, comprising the following amino acid sequence:
(M) AVADLALIPDVDIDSDGVFKYVLIRVHSAPRSGAPAAESKEIVRGYKWAÆYH

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ADIYDKVSGDMQKQGCDCECLGGGRISHQSQDKKIHVYGYSMAYGPAQHAISTEK
IKAKYPDYEVTWANDGY (SEQ ID NO:2).

Claim 6 (Cancel)

Claim 7 (Cancel)

Claim 8 (Cancel)

Claim 9 (Previously Presented) A method of claim 19, where said cDNA comprises the nucleotide sequence:

(ATG) GCGGTGGCGGACCTCGCTCTCATTCCTGATGTGGACATCGACTCCGACGG
CGTCTTCAAGTATGTGCTGATCCGAGTCCACTCGGCTCCCCCGCTCCGGGGGCTCCG
GCTGCAGAGAGCAAGGAGATCGTGCGCGGCTACAAGTGGGCTGAGTACCATGCGG
ACATCTACGACAAAGTGTGCGGCGACATGCAGAAGCAAGGCTGCGACTGTGAGTG
TCTGGGCGGCGGGCGCATCTCCCACCAGAGTCAGGACAAGAAGATTCACGTGTAC
GGCTATTCCATGGCCTATGGTCCTGCCCAGCACGCCATTTCAACTGAGAAAATCA
AAGCCAAGTACCCCGACTACGAGGTCACCTGGGCTAACGACGGCTAC (SEQ ID
NO:1).

Claim 10 (Currently Amended) Pharmaceutical preparation comprising a polypeptide according to claim 1, ~~where appropriate, optionally~~ together with suitable excipients, carriers and other active ingredients.

Claim 11 (Previously Presented) An antibody directed to a polypeptide according to claim 1.

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Claim 12 (Cancel)

Claim 13 (Cancel)

Claim 14 (Cancel)

Claim 15 (Cancel)

Claim 16 (Cancel)

Claim 17 (Cancel)

Claim 18 (Cancel)

Claim 19 (Currently Amended) A method of producing a recombinant human histidine protein phosphatase, comprising:

expressing a cDNA coding for a human histidine protein phosphatase having the amino acid sequence of SEQ ID NO 2 in a cell to produce recombinant human histidine protein phosphatase, and

isolating said recombinant human histidine protein phosphatase.

Claim 20 (Cancel)

Claim 21 (Cancel)

Claim 22 (Cancel)